

FRACCIONES

Ficha 1 Nivel 1

Calcula y simplifica:

a) $\frac{1}{3} + \frac{3}{2} =$

b) $\frac{9}{4} + \frac{2}{5} =$

c) $\frac{11}{2} + \frac{4}{3} =$

d) $\frac{8}{4} - \frac{2}{3} =$

e) $-\frac{3}{2} - \frac{5}{4} =$

f) $-\frac{5}{3} + \frac{7}{6} =$

g) $\frac{7}{2} \cdot \frac{8}{3} =$

h) $\frac{5}{7} \cdot \frac{-3}{2} =$

i) $\frac{3}{2} : \frac{4}{5} =$

j) $\frac{5}{4} : \frac{3}{8} =$

k) $25 - \frac{3}{2} \cdot \frac{4}{5} =$

l) $\frac{18}{3} \cdot \frac{20}{15} + \frac{3}{5} =$

m) $\frac{1}{5} + \frac{3}{2} + \frac{1}{4} =$

n) $\frac{3}{5} + \frac{7}{10} - \frac{1}{6} =$

o) $\frac{2}{5} \cdot \frac{5}{6} \cdot \frac{3}{4} =$

SOLUCIONES

$$\text{a)} \frac{1}{3} + \frac{3}{2} = \frac{1 \cdot 2}{6} + \frac{3 \cdot 3}{6} = \frac{2}{6} + \frac{9}{6} = \frac{11}{6}$$

m.c.m. = 6

$$\text{b)} \frac{9}{4} + \frac{2}{5} = \frac{9 \cdot 5}{20} + \frac{2 \cdot 4}{20} = \frac{45}{20} + \frac{8}{20} = \frac{53}{20}$$

m.c.m. = 20

$$\text{c)} \frac{11}{2} + \frac{4}{3} = \frac{11 \cdot 3}{6} + \frac{4 \cdot 2}{6} = \frac{33}{6} + \frac{8}{6} = \frac{41}{6}$$

m.c.m. = 6

$$\text{d)} \frac{8}{4} - \frac{2}{3} = \frac{8 \cdot 3}{12} - \frac{2 \cdot 4}{12} = \frac{24}{12} - \frac{8}{12} = \frac{16}{12} = \frac{4}{3}$$

m.c.m. = 12

$$\text{e)} -\frac{3}{2} - \frac{5}{4} = -\frac{3 \cdot 2}{4} - \frac{5 \cdot 2}{4} = -\frac{12}{4} - \frac{10}{4} = -\frac{22}{4} = -\frac{11}{2}$$

$$\text{f)} -\frac{5}{3} + \frac{7}{6} = -\frac{5 \cdot 2}{6} + \frac{7}{6} = -\frac{10}{6} + \frac{7}{6} = -\frac{3}{6} = -\frac{1}{2}$$

m.c.m. = 6

$$\text{g)} \frac{7}{2} \cdot \frac{8}{3} = \frac{7 \cdot 8}{2 \cdot 3} = \frac{56}{6} = \frac{28}{3}$$

$$\text{h)} \frac{5}{7} \cdot \frac{-3}{2} = \frac{5 \cdot (-3)}{7 \cdot 2} = \frac{-15}{14}$$

$$\text{i)} \frac{3}{2} : \frac{4}{5} = \frac{3 \cdot 5}{2 \cdot 4} = \frac{15}{8}$$

$$\text{j)} \frac{5}{4} : \frac{3}{8} = \frac{5 \cdot 8}{4 \cdot 3} = \frac{40}{12} = \frac{10}{3}$$

$$\text{k)} 25 - \frac{3}{2} \cdot \frac{4}{5} = 25 - \frac{3 \cdot 4}{2 \cdot 5} = 25 - \frac{12}{10} = \frac{25 \cdot 10}{10} - \frac{12}{10} = \frac{250}{10} - \frac{12}{10} = \frac{238}{10} = \frac{119}{5}$$

Primero hay que multiplicar las fracciones y después sumar

m.c.m. = 10

$$\text{l)} \frac{18}{3} \cdot \frac{20}{15} + \frac{3}{5} = \frac{360}{45} + \frac{3}{5} = \frac{360}{45} + \frac{3 \cdot 9}{45} = \frac{360}{45} + \frac{27}{45} = \frac{387}{45} = \frac{43}{5}$$

Primero hay que multiplicar las fracciones y después sumar

m.c.m. = 45

$$\text{m)} \frac{1}{5} + \frac{3}{2} + \frac{1}{4} = \frac{1 \cdot 4}{20} + \frac{3 \cdot 10}{20} + \frac{1 \cdot 5}{20} = \frac{4}{20} + \frac{30}{20} + \frac{5}{20} = \frac{39}{20}$$

m.c.m. = 20

$$\text{n)} \frac{3}{5} + \frac{7}{10} - \frac{1}{6} = \frac{3 \cdot 6}{30} + \frac{7 \cdot 3}{30} - \frac{1 \cdot 5}{30} = \frac{18}{30} + \frac{21}{30} - \frac{5}{30} = \frac{34}{30}$$

m.c.m. = 30

$$\text{o)} \frac{2}{5} \cdot \frac{5}{6} \cdot \frac{3}{4} = \frac{2 \cdot 5 \cdot 3}{5 \cdot 6 \cdot 4} = \frac{30}{120} = \frac{1}{4}$$